

Notice of Allowability

Application No.

10/701,161

Examiner

Hai Vo

Applicant(s)

CAMPBELL ET AL.

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 03/16/2007.
2. ☒ The allowed claim(s) is/are 1,4-6,9-22,24,25,32,33 and 35-40.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20070405</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Maxwell J. Petersen on 04/04/2007.

The application has been amended as follows:

The claims:

1. (Currently Amended) A bonded structure comprising:

a first substrate;

a second substrate; and an adhesive composition bonding the first substrate and the second substrate to one another at an add-on level between about 0.5 and about 25 grams/meter², wherein the bonded structure has a dynamic peel strength greater than 215 grams per 25 millimeters and has no burn-through visual defects greater than about 1 millimeter, and the adhesive composition comprises:

about ~~50~~ 75 to about 99% by weight amorphous poly-alpha-olefin, about ~~5~~ 1 to about ~~50%~~ 5% by weight tackifier, ~~and at least about 80% combined weight of the amorphous poly-alpha-olefin and the tackifier,~~ and

zero to about 20% combined weight of one or more additives selected from the group consisting of color pigments, fragrances, fillers, block copolymer compatibilizers, waxes, and oils,

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the fillers being selected from the group consisting of titanium dioxide, carbon black and calcium carbonate,

the amorphous poly-alpha-olefin, tackifier and one or more additives together constituting about 100% by weight of the adhesive composition,

the tackifier consisting of a C5 hydrocarbon tackifier and having has a molecular weight of about 2000 Daltons or less.

24. (Currently Amended) An article comprising:

a first substrate;

a second substrate; and

an adhesive composition bonding the first substrate and the second substrate to one another at an add-on level between about 0.5 and about 25 grams/meter² thereby forming a bonded structure, wherein the bonded structure has a dynamic peel strength greater than 215 grams per 25 millimeters and has no burn-through visual defects greater than about 1 millimeter, the article is selected from the group consisting of personal care products, health/medical products, and household/industrial products, and the adhesive composition comprises:

about ~~50~~ 75 to about 99% by weight amorphous poly-alpha-olefin, about ~~5~~ 1 to about ~~50%~~ 5% by weight tackifier, ~~and at least about 80% combined weight of the amorphous poly-alpha-olefin and the tackifier,~~ and

zero to about 20% combined weight of one or more additives selected from the group consisting of color pigments, fragrances, fillers, block copolymer compatibilizers, waxes, and oils,

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the fillers being selected from the group consisting of titanium dioxide, carbon black and calcium carbonate,

the amorphous poly-alpha-olefin, tackifier and one or more additives together constituting about 100% by weight of the adhesive composition,

the tackifier consisting of a C5 hydrocarbon tackifier and having has a molecular weight of about 2000 Daltons or less.

25. (Currently Amended) An article comprising:

a film;

a nonwoven web; and

an adhesive composition bonding the film and the nonwoven web to one another at an add-on level between about 2 and about 5 grams/meter² thereby forming a bonded structure, wherein the bonded structure has a dynamic peel strength greater than 215 grams per 25 millimeters and has no burn-through visual defects greater than about 1 millimeter, the article is selected from the group consisting of personal care products, health/medical products, and household/industrial products, and the adhesive composition comprises:

about ~~50~~ 75 to about 99% by weight amorphous poly-alpha-olefin, about ~~5~~ 1 to about ~~50%~~ 5% by weight C5 hydrocarbon tackifier, ~~and at least about 80% combined weight of the amorphous poly-alpha-olefin and the tackifier,~~ and

zero to about 20% combined weight of one or more additives selected from the group consisting of color pigments, fragrances, fillers, block copolymer compatibilizers, waxes, and oils,

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the fillers being selected from the group consisting of titanium dioxide, carbon black and calcium carbonate,

the amorphous poly-alpha-olefin, tackifier and one or more additives together constituting about 100% by weight of the adhesive composition,

the tackifier consisting of a C5 hydrocarbon tackifier and having ~~has~~ a molecular weight of about 2000 Daltons or less.

33. (Previously Presented) The bonded structure of Claim 1, wherein the adhesive composition comprises about ~~70%~~ 80% to about 95% by weight of the amorphous poly-alpha-olefin.

Cancel claims 8 and 34.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: Note that Applicants' amendment, Applicants' argument and Examiner's amendment are sufficient to overcome the art rejections and sufficient to place the instant claims in condition for allowance.

Of the references of record, the most pertinent are Suzuki et al (US 5,763,333), McCormack (US 5,843,057), Morman et al (US 6,632,212), Karandonos (US 6,627,723), Donker et al (US 6,605,680) and Quinn et al (US 6,833,404).

Suzuki teaches a laminate comprising a nonwoven layer, a moisture permeable film layer, and an adhesive material bonding the nonwoven layer and the film layer together at an add-on level between 0.5 to 7 gsm (abstract). Suzuki teaches an adhesive composition comprising an amorphous alpha-olefin copolymer, an antioxidant

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and 30 to 70 wt% C5 hydrocarbon tackifier based on the total weight of the adhesive composition (column 7, lines 50-65).

McCormack teaches a laminate comprising a nonwoven layer, a stretch-thinned film, and an adhesive material bonding the nonwoven layer and the film layer together at an add-on level between 0.1 to 20 gsm. McCormack discloses the amorphous polyalphaolefin (APAO) based adhesive containing a tackifier and an antioxidant (column 9, lines 62-63).

Morman teaches a laminate comprising a nonwoven layer, a stretch-thinned film bonded to the nonwoven layer by an adhesive material at an add-on level of 3 gsm (examples).

Karandonos teaches an amorphorous alpha-olefin based adhesive for use in diapers comprising 1 to 25% by weight of tackifier and a small amount of an anti-oxidant stabilizer (column 4, lines 20-21, and column 6, lines 23-25). Karandonos teaches away from the use of a tackifier having low molecular weight in view of excessive migration of its constituents and blending requirement. Karandonos does not teach that a tackifier consists of a C5 hydrocarbon tackifier and has a molecular weight of 2000 daltons or less.

Donker teaches a tackifier in the amorphorous alpha-olefin based adhesive wherein the tackifier has a molecular weight of 2000 daltons or less and comprises a reaction product of a C5 hydrocarbon stream comprising unsaturated aliphatic monomers and a monovinyl aromatic C8 to C12 monomer. Donker teaches an

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adhesive composition comprising about 50 to 80% by weight tackifier (tables 5-8).

Donker does not teach a tackifier consisting of a C5 hydrocarbon tackifier.

Quinn teaches an amorphous alpha-olefin based adhesive comprising 10 wt% to 80 wt% C5 hydrocarbon tackifier wherein the tackifier has a molecular weight of 2000 daltons or less. Quinn does not teach the adhesive composition comprising 1 to 5 wt% C5 hydrocarbon tackifier.

Note that, none of the cited art, alone or in combination, teaches or suggests the adhesive composition as set forth in the claims. Accordingly, the instant claims are deemed allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Thursday, from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HV

Hai Vo

**HAIVO
PRIMARY EXAMINER**